

Name: \_\_\_\_\_

### pa1030: Box multiplication of linear binomials (v3)

#### Example

Use the box method to multiply  $(6x + 3)$  and  $(2x + 4)$ .

*	6x	3	
2x	$12x^2$	6x	$12x^2 + 6x + 24x + 12$
4	24x	12	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER:  $12x^2 + 30x + 12$

#### Question 1

Use the box method to multiply  $(6x + 3)$  and  $(5x + 7)$ .

*	6x	3	
5x	$30x^2$	15x	
7	42x	21	

ANSWER:  $30x^2 + 57x + 21$

### Question 2

Use the box method to multiply  $(-3x + 4)$  and  $(5x + 9)$ .

*	$-3x$	4
5x	$-15x^2$	20x
9	$-27x$	36

ANSWER:  $-15x^2 - 7x + 36$

### Question 3

Use the box method to multiply  $(9x - 6)$  and  $(-3x + 8)$ .

*	9x	-6
-3x	$-27x^2$	18x
8	72x	-48

ANSWER:  $-27x^2 + 90x - 48$